



# Town of Lake George Septic Initiative Program

February 11, 2019

Lake George Town Board Meeting

# Outline

Town of Lake George Septic Initiative Program (SIP)

2015 DEC WQIP Grant

SIP Findings

Prioritization Algorithm

Priority Areas

SIP Recommendations

Next Steps

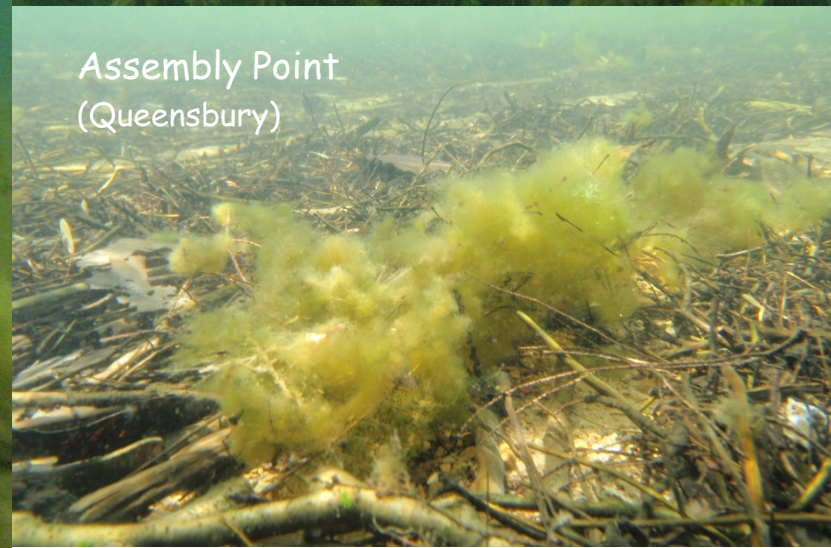
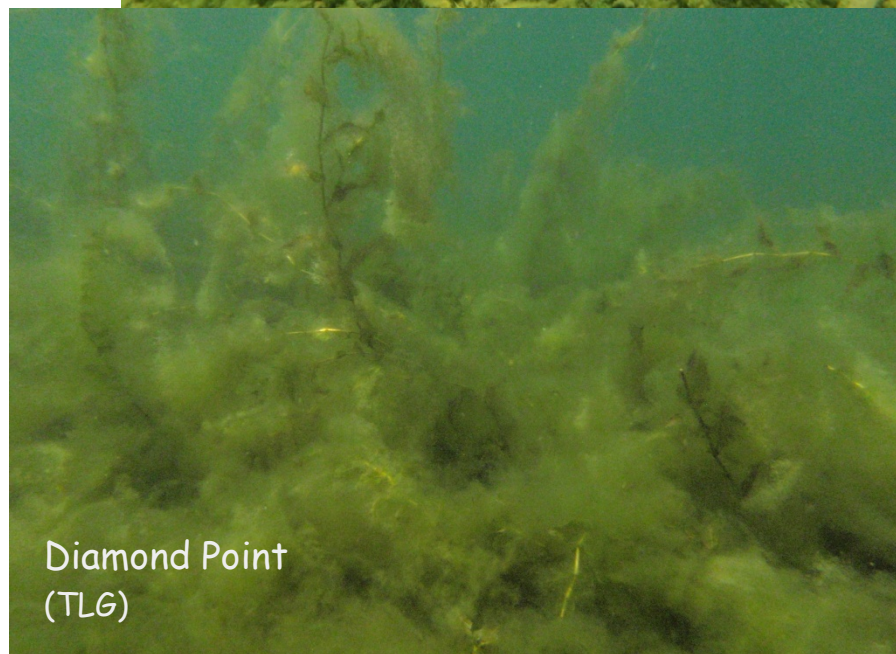
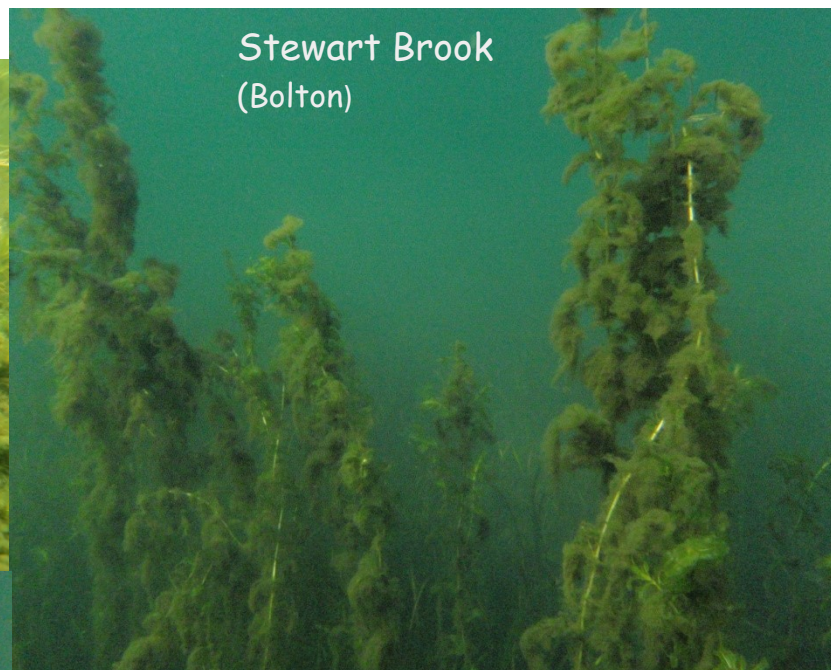


# Town of Lake George Septic Initiative Program

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# Lake George Algae Blooms



# TOLG Septic Initiative Program

## Purpose and Goals

- Inventory and assess all existing onsite wastewater treatment systems (OWTS) within the town, with the goal to ensure that OWTS are functioning optimally.
- Increase Public Awareness through survey
- Develop an inventory
- Outreach & Education of residents, designers and contractors
- Obtain funding

2/8/2019



# 2015 DEC Water Quality Improvement Program (WQIP) Grant

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## Round 12 (2015) DEC WQIP Grant

- Awarded \$104,000 Grant
- 6 major “objectives” administered by The FUND
  - Inventory and Assessment of all OWTs
  - SIP Report and Mapping
  - Municipal Outreach and Coordination
  - Algae sampling and water quality testing
  - High Priority areas & Funding
  - Amend Town Sanitary Code/Ordinance



# Town of Lake George Septic Initiative Program

*An analysis of the management of onsite wastewater  
treatment systems in the Town of Lake George*

December 2018

Completed by The FUND for Lake George and the Lake George Waterkeeper,  
with funding support from New York State Department of Environmental Conservation.





# Septic Initiative Program Findings

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## LGSIP FINDINGS

- 34% response rate on surveys
- Approximately 1/3 of systems are under normal life expectancy (30-40 years), 1/3 are at or exceeding life expectancy and 1/3 no known information.
- 20% of septic tanks are undersized.
- 1/3 of septic tank volumes are unknown.
- 20% of septic systems have no known information.
- 20% of septic systems utilize drywells.



## LGSIP FINDINGS

- Over 50% of parcels have no record or have never been maintained.
- 1/3 of properties have the highest inspection concern level (Tier 1)
- 14% of algae samples indicate probable organic pollution
- 50% of the algae samples indicate excessive nutrients.

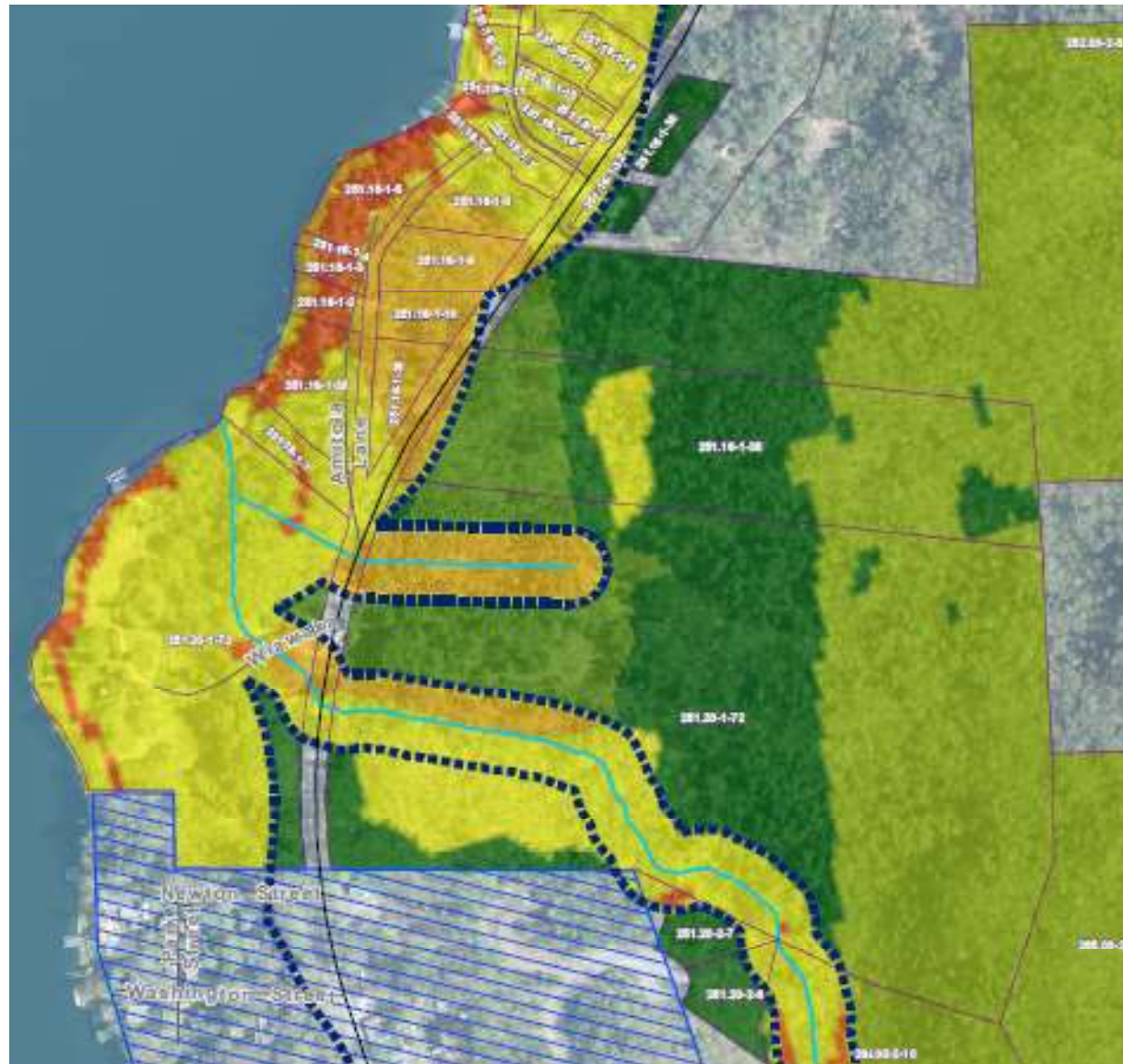


# Algae Sampling





# Site Suitability





# Prioritization Map





# Recommendations

## MANAGEMENT

### Short-term (Year 0-1)

- Set inspection program as per recommended inspection priority properties focusing on Tier 1
- Develop GIS Database of Inventory Assessment for the Town Planning and Zoning Department

### Mid-Term (Year 1-3)

- Review NYSDEC State Pollutant Discharge Elimination System (SPDES) Permits and Inspections and add to inventory database.
- Work with NYSDEC to ensure routine inspections of SPDES Permit systems.
- Consider the establishment of subwatershed management districts for improved inspection, management, and funding similar to the Town of Queensbury.

### Long-Term (Year 3-5)

- Research development of test pilot program for new technologies and practices in the Lake George basin. Partner with organizations like New England Interstate Water Pollution Control Commission (NEIWPCC), National Sanitary Foundation (NSF), Massachusetts Test Center to identify products and collect performance data for residential onsite treatment systems to become a center for OWTS testing in New York State.

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# Recommendations

## MANAGEMENT

### Short-term (Year 0-1)

### Mid-Term (Year 1-3)

### Long-Term (Year 3-5)

- Investigate a reduced cost pumpout program secured by the Town for properties within the Project Area. This would require properties to guarantee to schedule a routine pumpout once every 3 years and could be arranged through establishing a management district.
- Consider improving treatment methodologies including time dosed dispersal for better effluent distribution reducing soil impacts and reducing dispersal depth to increase biological uptake and treatment.
- Create an Operation and Maintenance Service through the Planning & Zoning Department, a professional providing service to the public (check operation, perform routine maintenance and repairs, upgrade when necessary, collect system records, troubleshoot).



# Recommendations

## OUTREACH

Short-term (Year 0-1)	Mid-term (Year 1-3)	Long-term (Year 3-5)
<ul style="list-style-type: none"><li>• Provide presentation to Town Planning and Zoning Board, and Consolidated Board of Health</li><li>• Contact municipal Town Boards and Planning/Zoning Departments in the basin to schedule presentations.</li></ul>	<ul style="list-style-type: none"><li>• Prepare educational brochure for Town residents on the LGSIP, available information, and the findings of the assessment.</li><li>• Create a page on the Town website dedicated to onsite wastewater treatment systems to provide information on new technologies, maintenance, publications, and links to websites.</li><li>• Co-host the second Septic Summit with The FUND for Lake George.</li></ul>	

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# Recommendations

## REGULATION

### Short-term (Year 0-1)

Adopt Septic System Inspection Transfer Law.

### Mid-term (Year 1-3)

### Long-term (Year 3-5)

Require all dwellings to install water conservation fixture devices to reduce burden on absorption systems and have the Town seek sustainability grant funding to accomplish.

## MONITORING

### Short-term (Year 0-1)

Compare algae biomonitoring results to inspection priority properties.

### Mid-term (Year 1-3)

Develop a monitoring study of onsite wastewater treatment systems with residents to collect data on system efficiency and impacts.

### Long-term (Year 3-5)

Implement long-term algae biomonitoring program to create database and document improvements to water quality.

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# Recommendations

## FUNDING

Short-term (Year 0-1)	Mid-term (Year 1-3)	Long-term (Year 3-5)
<ul style="list-style-type: none"> <li>• Work with The FUND for Lake George for grant funding to address identified Priority Areas.</li> <li>• Work with other Warren County municipalities and Warren County Planning Department to have Warren County apply to New York State Environmental Funding Corporation to be placed on NYS Infrastructure Grant Program for funding for septic system replacement.</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate partnership with local lending organizations for water quality improvement loans to provide low or no interest loans for onsite treatment system upgrades/replacements.</li> <li>• Seek financial support from environmental foundation for water quality protection through application of innovative solution(s).</li> </ul>	<p>Create a watershed management improvement district for the Project Area that would establish a PILOT (Payment In Lieu of Taxes) Program to allow property owners who replace and/or upgrade their septic systems to take that cost off their property assessment, which could be implemented within an established management district.</p>

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# Looking Forward

- Complete Final Report
- Establish GIS Inventory Data Base
- Develop Inspection Program
- Continue Algae Biomonitoring
- Secure Funding for Prioritized Areas
- Develop Lake-wide Strategy



## Take Aways

- Management programs for onsite wastewater treatment systems, septic systems, are necessary based on review of system inventory and maintenance records.
- The Town of Lake George has put together an approach based on public outreach and inventory documentation to support an inspection and management program.
- The FUND for Lake George has developed a GIS based algorithm to determine prioritized management areas based on site suitability, existing system evaluation and water quality.

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# Questions?

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# Thank You!!

